

## TMS800-2 Product Guide

ASME B30.5  
Imperial 85%



### Features

- 77 t (80 Ust)
- 12,2 m - 39,0 m (39.4 ft - 128.0 ft) four-section MEGAFORM™ boom
- TWIN-LOCK™ boom pinning system
- Manual or hydraulic 10,5 m - 17,6 m (34.5 ft - 57.6 ft) bi-fold swingaway extension options and an 8 m (26 ft) insert
- Crane Control System (CCS)
- High visibility cab with 20° tilt
- Up to 12 700 kg (28,000 lb) counterweight with hydraulic removal system

# GROVE TMS800-2

The TMS800-2 sets a new standard for truck mounted cranes; strong load charts, long boom and a low gross vehicle weight.

## Features

### > MEGAFORM™ boom

The Grove MEGAFORM™ boom shape eliminates weight and increases capacity compared to conventional shapes. The simplified TWIN-LOCK™ boom pinning system automatically pins the sections in position using two horizontal large diameter pins. A single cylinder inside the boom reduces weight which has been used elsewhere to strengthen the machine.

### > Counterweight

Up to 12 700 kg (28,000 lb) of counterweight can be power installed and removed from the superstructure cab — allowing for easy transport to and from the job site.

### > Control system

Crane functions are controlled by Crane Control System (CCS). CCS offers a user-friendly interface, two full graphic displays mounted vertically for easier viewing and a jog dial for easier navigation and data input. The system allows the electronic controllers to be reprogrammed by the operator for specific speed and reaction. Parts commonality across Grove, Manitowoc and Potain product lines enhances operator familiarization and serviceability.

### > Outriggers

Two-stage outriggers provide four position settings - 0%, 54%, 77%, and 100%.

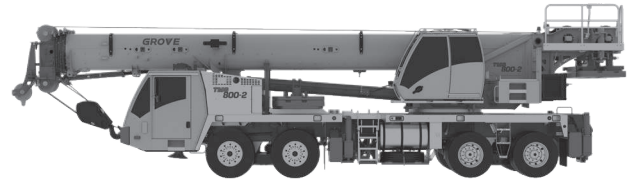
### > Optional power luffing extension

For improved up-and-over reach, a power luffing extension is available on the TMS800-2. It is hydraulically offsettable from the superstructure cab, 0° to 45°.



## Job site benefits

- > Multiple ladders on the carrier make accessing the crane easy
- > Standard hydraulic tilt cab 0°- 20° for exceptional visibility and operator comfort while working with long boom, inserts, and swingaway
- > TWINLOCK™ boom pinning system helps maximize the crane's load chart capacity by eliminating weight inside the extended boom
- > Four position outriggers provide more flexibility for setup in congested work environments
- > Traction control provides improved traction on the job site
- > Available hydraulically offsettable 10,5 m - 17,6 m (34.5 ft - 57.6 ft) bi-fold 0°- 45° offset capability swingaway. This option is conveniently operated inside the cab and is easily stowed and erected using hydraulics
- > Standard wireless rigging remote enables convenient setup



## What you need, when you need it.

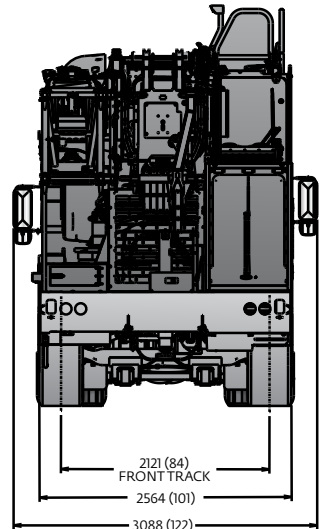
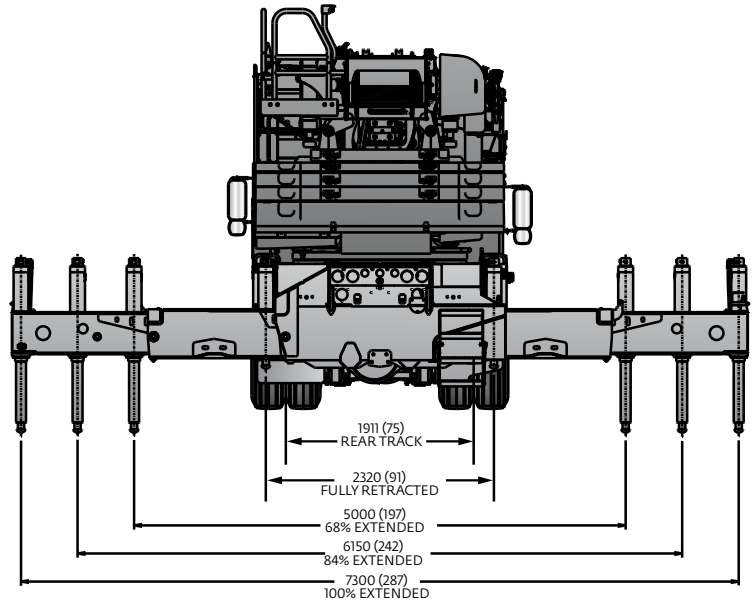
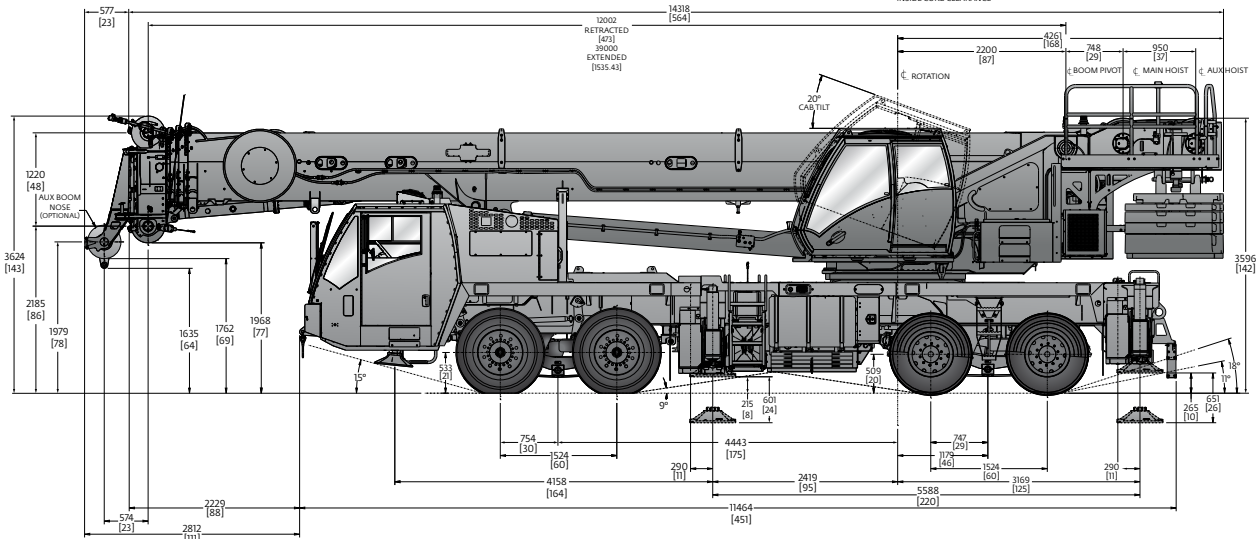
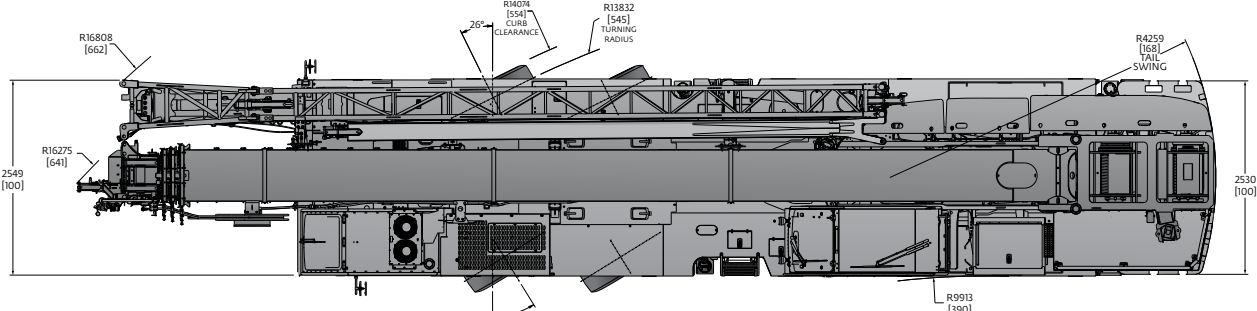
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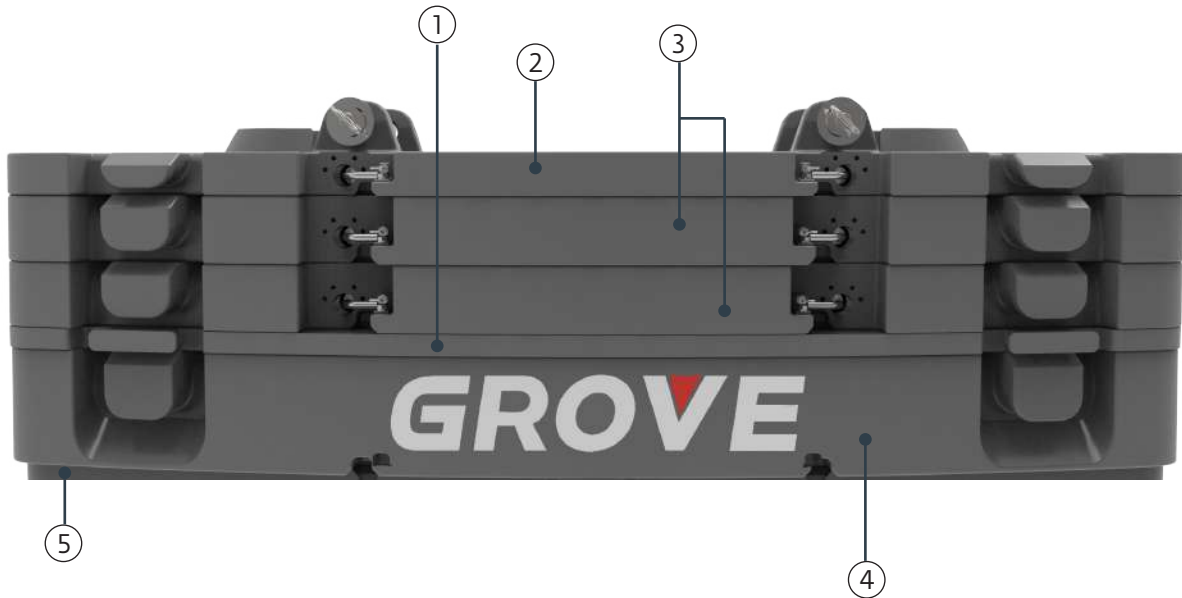
# Dimensions




Dimensions shown in mm (in)

# Counterweight

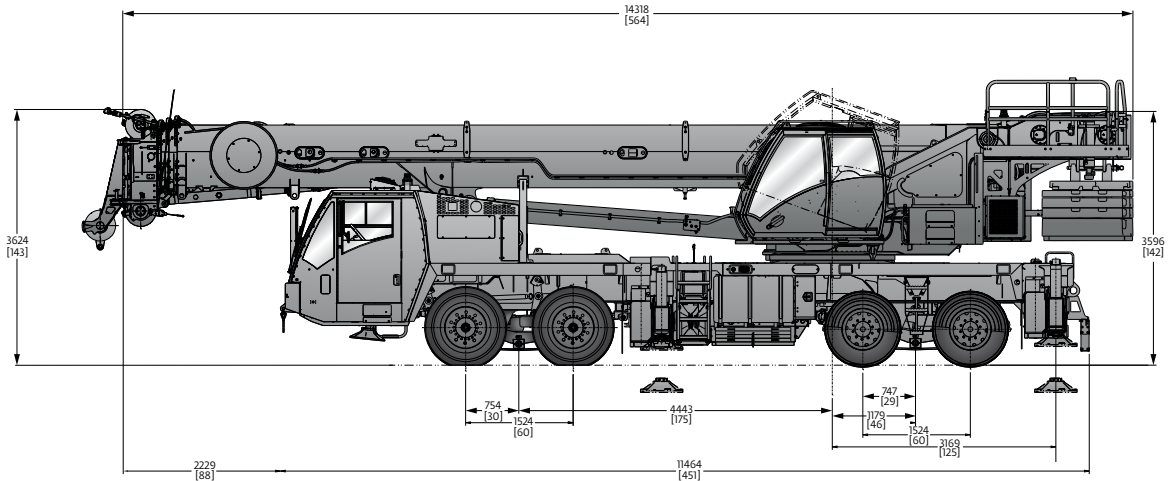
## Counterweight configurations



	1 0,9 t (2,000 lb)	2 1,4 t (3,000 lb)	3 1,2 t (5,000 lb)	4 2,3 t (10,000 lb)	5 1,4 t (3,000 lb Tray)
3,6 t (8,000 lb)			1		1
4,5 t (10,000 lb)	1		1		1
5,9 t (13,000 lb)	1	1	1		1
6,8 t (15,000 lb)	1		2		1
7,3 t (16,000 lb)		1	2		1
8,2 t (18,000 lb)	1	1	2		1
9,5 t (21,000 lb)		1	1	1	1
11,8 t (26,000 lb)		1	2	1	1
12,7 t (28,000 lb)	1	1	2	1	1

# Travel proposals

## Boom over front



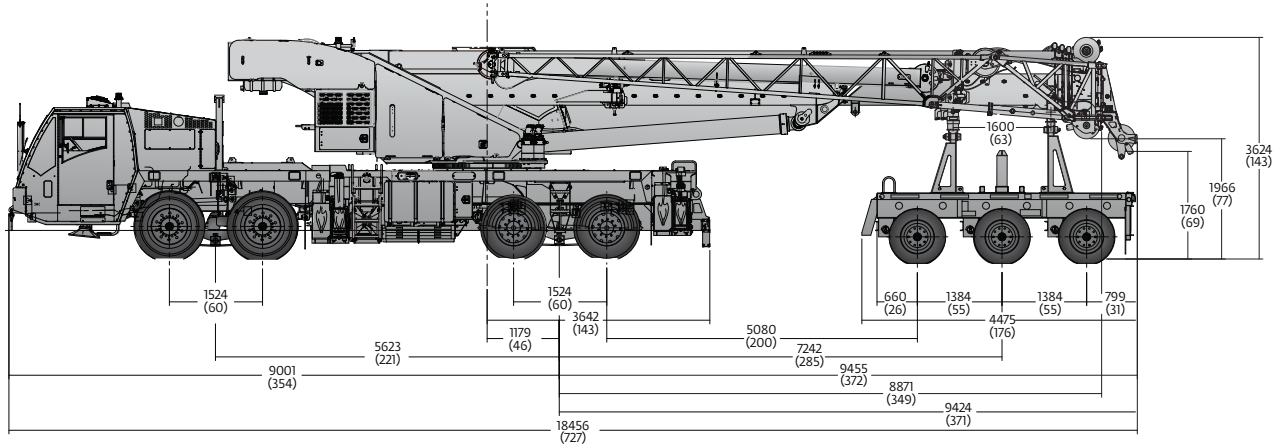
Dimensions shown in mm (in)

## TMS800-2 Boom Over Front

	Front		Rear		GVW	
<b>Basic machine:</b> Includes X12 on-highway engine, main and auxiliary hoists with wire rope, air conditioning chassis and superstructure cabs, no counterweight and includes driver.	16,842	37,130	16,927	37,318	33,769	74,448
<b>Add:</b> 3000 lb counterweight on carrier deck and 5000 lb counterweight on superstructure. Total counterweight 8000 lb.	17,011	37,502	20,397	44,968	37,408	82,470
<b>Add:</b> 6000 lb counterweight on carrier deck and 7000 lb counterweight on superstructure. Total counterweight 13000 lb.	17,784	39,208	21,911	48,306	39,696	87,514
<b>Add:</b> 10000 lb counterweight on carrier deck and 8000 lb counterweight on superstructure. Total counterweight 18,000 lb.	19,149	42,217	22,824	50,319	41,974	92,536
<b>Add:</b> 13000 lb counterweight on carrier deck and 15,000 lb counterweight on superstructure. Total counterweight 28,000 lb.	18,900	41,667	27,610	60,869	46,510	102,536
Auxiliary boom nose	178	393	(90)	(199)	88	194
Manual 10,5 m to 17,6 m (34.5 ft - 57.6 ft) bi-fold swingaway (includes brackets)	1,953	4,306	(262)	(578)	1,691	3,728
Hydraulic 10,5 m to 17,6 m (34.5 ft - 57.6 ft) bi-fold swingaway (includes brackets and hose reel)	2,187	4,822	(350)	(771)	1,838	4,051
11,0 t (12.1 USt) top-swiveling overhaul weight stowed	435	958	(140)	(309)	294	649
45 t (50 USt), three-sheave quick-reeving hook block at bumper	951	2,097	(391)	(863)	560	1,234
<b>Maximum Allowable</b>	23,224	51,200	27,216	60,000	50,439	111,200

# Travel proposals

## Trailing boom



Dimensions shown in mm (in)

### TMS800-2 Trailing Boom

	Front		Rear		Boom Dolly		GVW	
<b>Basic machine:</b> Includes X12 on-highway engine, main and auxiliary hoists with wire rope, air conditioning chassis and superstructure cabs, no counterweight, includes driver and 6800 lb dolly.	15,053	33,186	13,456	29,665	8,374	18,461	36,883	81,312
<b>Add:</b> 5000 lb counterweight on rear counterweight mount deck and 3000 lb counterweight on dolly. Total counterweight 8000 lb.	14,373	31,686	16,454	36,275	9,735	21,461	40,561	89,422
<b>Add:</b> 3000 lb counterweight on superstructure, 5000 lb counterweight on rear counterweight mount deck and 5000 lb counterweight on dolly. Total counterweight 13,000 lb.	15,547	34,276	16,650	36,706	10,652	23,483	42,849	94,465
<b>Add:</b> 3000 lb counterweight on superstructure, 5000 lb counterweight on rear counterweight mount deck and 10000 lb counterweight on dolly. Total counterweight 18,000 lb.	15,547	34,276	16,650	36,706	12,930	28,505	45,127	99,487
<b>Add:</b> 10000 lb counterweight on superstructure, 5000 lb counterweight on rear counterweight mount deck and 13000 lb counterweight on dolly. Total counterweight 28,000 lb.	18,294	40,332	17,138	37,782	14,270	31,461	49,702	109,575
Auxiliary boom nose	(20)	(44)	(13)	(29)	121	267	88	194
Manual 10,5 m to 17,6 m (34.5 ft - 57.6 ft) bi-fold swingaway (includes brackets)	169	373	112	248	1,409	3,107	1,691	3,728
Hydraulic 10,5 m to 17,6 m (34.5 ft - 57.6 ft) bi-fold swingaway (includes brackets and hose reel)	160	352	106	234	1,572	3,465	1,838	4,051
11,0 t (12.1 USt) top-swiveling overhaul weight stowed	435	958	(140)	(309)	-	-	294	649
45 t (50 USt), three-sheave quick-reeving hook block hanging on nose	(111)	(245)	(74)	(164)	745	1,643	560	1,234
<b>Maximum Allowable</b>	23,224	51,200	27,216	60,000	20,412	45,000	70,851	156,200



# Load handling

Auxiliary boom nose	86 kg (190 lb)
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### Hook blocks and overhaul weights:

75 t (83 USt), five-sheave	722 kg (1592 lb) +
45 t (50 USt), three-sheave	560 kg (1235 lb) +
26 t (28 USt), one-sheave	323 kg (712 lb) +
11 t (12 USt) overhaul weight	294 kg (648 lb) +

+ Refer to rating plate for actual weight.

When lifting over extension and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

Hoists	Cable specs	Permissible line pulls	Nominal cable length
Main	19 mm (3/4 in) 35x7 Class Rotation Resistant	7784 kg (17,160 lb)	653 ft 199 m
	Min. Breaking Strength 38 918 kg (85,800 lb)		
Auxiliary	19 mm (3/4 in) 35x7 Class Rotation Resistant Min.	7784 kg (17,160 lb)	420 ft 128 m
	Breaking Strength 38 918 kg (85,800 lb)		

The approximate weight of 19 mm (3/4 in) wire rope is 2.2 kg/m (1.5 lb/ft)

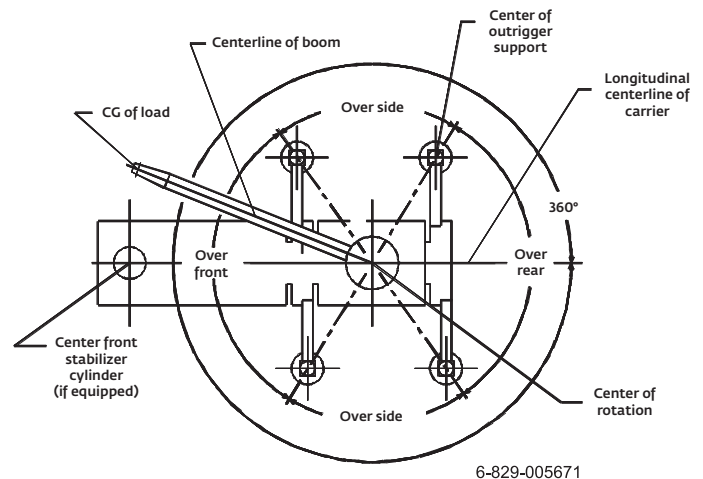
Hoist performance			
Wire rope layer	Hoist line pull	Drum rope capacity m (ft)	
		Available*	Total
1	10 000 kg (22,100 lb)	33,8 m (111 ft)	33,8 m (111 ft)
2	9250 kg (20,400 lb)	36,6 m (120 ft)	70,4 m (231 ft)
3	8570 kg (18,900 lb)	39,6 m (130 ft)	110 m (361 ft)
4	7980 kg (17,600 lb)	42,4 m (139 ft)	152 m (500 ft)
5	7480 kg (16,500 lb)	45,4 m (149 ft)	198 m (649 ft)

\*Max lifting capacity

19 mm 35x7 Class: 7784 kg (17,160 lb)

## Working area diagram

Bold lines determine the limiting position of any load for operation within working areas indicated.



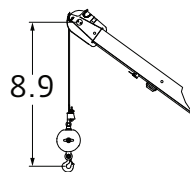
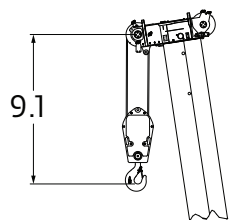
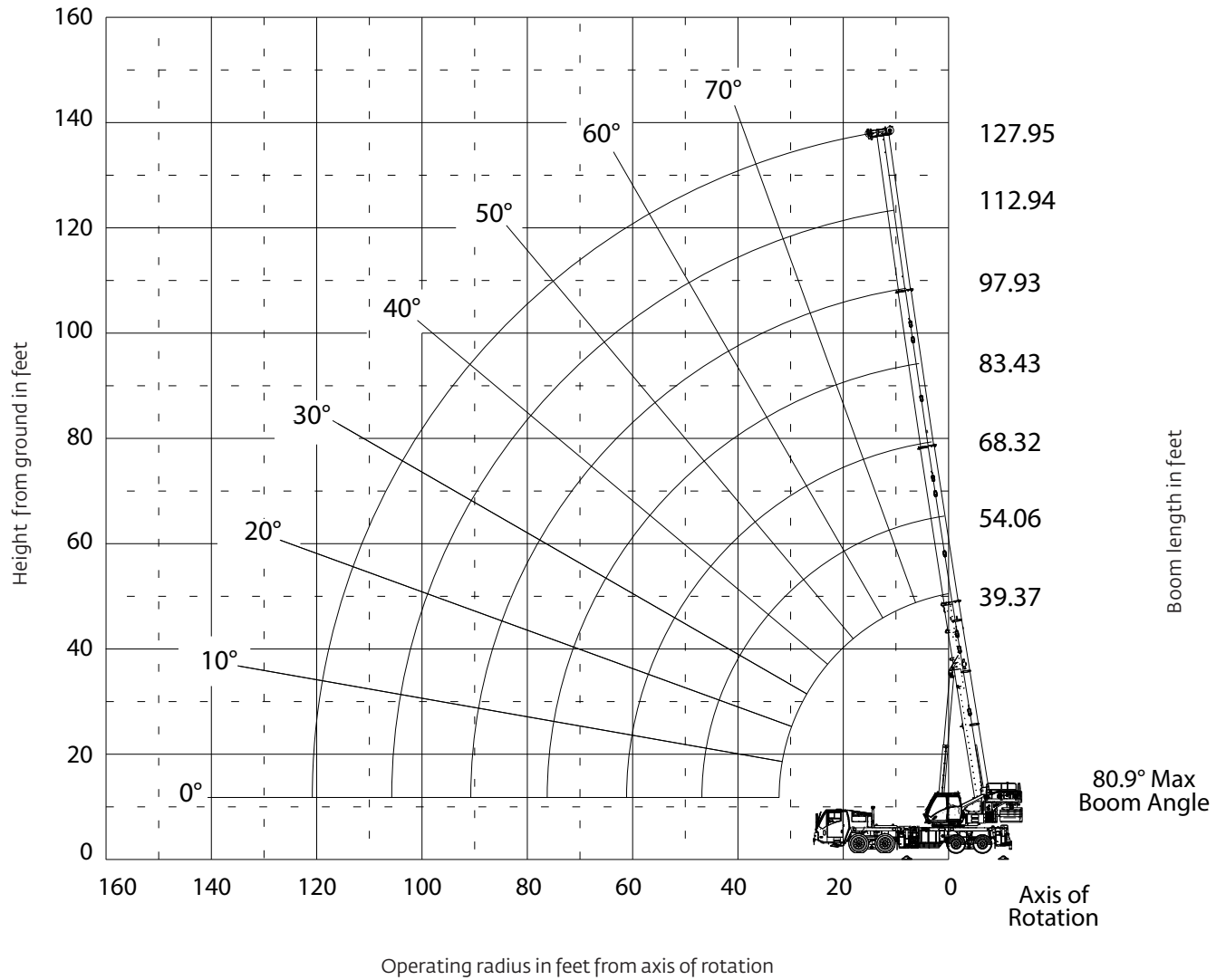
*THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.  
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.*

# Working range

Main boom

39.4 ft - 128.0 ft main boom

(Boom deflection not shown)



Dimensions are for the largest Grove furnished hook block and overhaul ball, with anti-two block activated.

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# Load chart

## Main boom



39.4 ft - 128.0 ft  
Fixed lengths



100%  
24 ft



360°



28,000 lb



Pounds


Feet	39.4	54.1 - 54.5	69.2 - 69.5	81.0 - 84.2	93.0 - 95.4	96.2 - 99.2	107.4 - 112.9	119.0 - 125.0	128.0
8.0	160,000	--	--	--	--	--	--	--	--
9.0	160,000	157,500	106,500	--	--	--	--	--	--
10.0	159,000	151,500	106,500	--	--	--	--	--	--
12.0	142,500	139,000	106,500	76,400	--	--	--	--	--
15.0	122,500	120,500	106,500	75,850	55,500	--	--	--	--
20.0	97,700	98,050	89,650	65,350	54,750	54,600	42,300	--	--
25.0	76,800	77,050	75,450	56,300	46,050	46,050	42,300	32,750	27,150
30.0	59,300	59,700	60,750	49,450	39,450	39,500	38,000	32,550	27,150
35.0	--	47,300	47,300	44,000	34,300	34,450	33,200	29,450	27,150
40.0	--	38,000	38,200	39,350	30,200	30,350	29,350	26,550	24,800
45.0	--	32,000	31,700	32,950	26,850	27,050	26,150	24,100	22,500
50.0	--	--	27,500	28,000	24,050	24,250	23,500	22,050	20,550
55.0	--	--	24,250	24,100	21,650	21,900	21,300	20,100	18,900
60.0	--	--	21,150	20,950	19,950	19,900	19,350	18,400	17,450
65.0	--	--	--	18,400	18,550	18,000	17,700	17,000	16,200
70.0	--	--	--	16,300	17,050	16,000	16,250	15,550	15,050
75.0	--	--	--	14,500	15,200	14,150	14,800	14,300	13,850
80.0	--	--	--	--	13,650	12,600	13,250	13,200	12,750
85.0	--	--	--	--	12,300	11,250	11,900	12,150	11,800
90.0	--	--	--	--	--	10,000	10,650	11,100	10,950
95.0	--	--	--	--	--	--	9,730	10,050	9,970
100.0	--	--	--	--	--	--	9,200	9,110	9,030
105.0	--	--	--	--	--	--	8,660	8,270	8,180
110.0	--	--	--	--	--	--	--	7,520	7,430
115.0	--	--	--	--	--	--	--	6,850	6,760
120.0	--	--	--	--	--	--	--	--	6,170

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# Load chart

## Main boom

 39.4 ft - 128.0 ft  
 Fixed lengths

 100%  
 24 ft

 360°

 18,000 lb


Pounds


Feet	39.4	54.1 - 54.5	69.2 - 69.5	80.4 - 84.2	93.0 - 95.4	96.2 - 97.9	107.0 - 112.9	119.0 - 125.0	128.0
8.0	160,000	--	--	--	--	--	--	--	--
9.0	160,000	157,500	106,500	--	--	--	--	--	--
10.0	154,000	151,500	106,500	--	--	--	--	--	--
12.0	138,000	138,500	106,500	76,400	--	--	--	--	--
15.0	119,500	120,000	106,500	75,850	55,500	--	--	--	--
20.0	93,100	93,600	89,650	65,350	54,750	54,600	42,300	--	--
25.0	69,650	69,750	70,850	56,300	46,050	46,050	42,300	32,750	27,150
30.0	50,300	51,850	51,500	49,450	39,450	39,500	38,000	32,550	27,150
35.0	--	39,900	39,900	41,100	34,300	34,450	33,200	29,450	27,150
40.0	--	32,700	33,400	33,300	30,200	30,350	29,350	26,550	24,800
45.0	--	26,900	27,950	27,650	25,650	27,050	26,150	24,100	22,500
50.0	--	--	23,550	23,300	23,400	22,700	23,350	22,050	20,550
55.0	--	--	20,050	19,850	20,450	19,300	19,850	19,950	18,900
60.0	--	--	17,250	17,150	17,700	16,700	17,150	17,300	17,350
65.0	--	--	--	15,600	15,600	14,450	15,550	15,400	15,250
70.0	--	--	--	13,950	13,650	12,600	13,900	13,550	13,400
75.0	--	--	--	12,500	12,050	11,000	12,450	12,000	11,850
80.0	--	--	--	--	10,700	10,000	11,100	10,650	10,550
85.0	--	--	--	--	9,520	9,340	9,930	9,530	9,430
90.0	--	--	--	--	--	8,760	8,890	8,520	8,430
95.0	--	--	--	--	--	--	7,980	7,610	7,520
100.0	--	--	--	--	--	--	7,180	6,800	6,720
105.0	--	--	--	--	--	--	6,480	6,080	6,000
110.0	--	--	--	--	--	--	--	5,440	5,360
115.0	--	--	--	--	--	--	--	4,880	4,790
120.0	--	--	--	--	--	--	--	--	4,280

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# Load chart

## Main boom

 39.4 ft - 128.0 ft  
 Fixed lengths

 100%  
 24 ft

 360°

 13,000 lb






Pounds

Feet	39.4	54.1 - 54.5	68.3 - 69.5	81.0 - 84.2	91.9 - 95.4	96.2 - 97.9	107.0 - 112.9	119.0 - 125.0	128.0
8.0	160,000	--	--	--	--	--	--	--	--
9.0	160,000	157,500	106,500	--	--	--	--	--	--
10.0	151,500	151,500	106,500	--	--	--	--	--	--
12.0	136,000	136,000	106,500	76,400	--	--	--	--	--
15.0	117,500	118,000	106,500	75,850	55,500	--	--	--	--
20.0	89,850	90,300	89,650	65,350	54,750	54,600	42,300	--	--
25.0	63,900	65,200	64,800	56,300	46,050	46,050	42,300	32,750	27,150
30.0	45,600	47,300	47,000	48,300	39,450	39,500	38,000	32,550	27,150
35.0	--	37,050	37,300	37,350	34,300	34,450	33,200	29,450	27,150
40.0	--	29,600	30,650	30,200	29,000	29,600	29,350	26,550	24,800
45.0	--	24,150	25,200	24,700	25,350	24,100	24,750	24,100	22,500
50.0	--	--	20,950	20,650	21,250	20,050	20,650	20,800	20,550
55.0	--	--	17,700	17,550	18,100	17,050	18,200	17,800	17,700
60.0	--	--	15,200	16,150	15,700	14,550	15,850	15,500	15,350
65.0	--	--	--	14,100	13,650	12,550	13,950	13,450	13,350
70.0	--	--	--	12,350	12,050	11,550	12,250	11,750	11,650
75.0	--	--	--	10,900	10,650	10,750	10,850	10,350	10,250
80.0	--	--	--	--	9,570	9,540	9,620	9,170	9,070
85.0	--	--	--	--	8,490	8,450	8,530	8,130	8,030
90.0	--	--	--	--	--	7,530	7,580	7,210	7,120
95.0	--	--	--	--	--	--	6,750	6,370	6,290
100.0	--	--	--	--	--	--	6,020	5,640	5,550
105.0	--	--	--	--	--	--	5,380	4,980	4,900
110.0	--	--	--	--	--	--	--	4,400	4,320
115.0	--	--	--	--	--	--	--	3,880	3,790
120.0	--	--	--	--	--	--	--	--	3,340

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# Load chart

## Main boom

 39.4 ft - 128.0 ft  
Fixed lengths

 100%  
24 ft

 360°

 8,000 lb



Pounds

Feet	39.4	54.1 - 54.5	68.3 - 69.5	80.4 - 84.2	91.9 - 95.4	96.2 - 97.9	107.4 - 112.9	119.0 - 125.0	128.0
8.0	160,000	--	--	--	--	--	--	--	--
9.0	158,000	157,500	106,500	--	--	--	--	--	--
10.0	149,000	149,500	106,500	--	--	--	--	--	--
12.0	133,500	134,000	106,500	76,400	--	--	--	--	--
15.0	116,500	116,500	106,500	75,850	55,500	--	--	--	--
20.0	86,600	86,150	87,500	65,350	54,750	54,600	42,300	--	--
25.0	57,700	59,000	58,600	56,300	46,050	46,050	42,300	32,750	27,150
30.0	40,950	42,600	42,300	43,600	39,450	39,500	38,000	32,550	27,150
35.0	--	33,350	34,250	33,750	32,400	33,100	33,200	29,450	27,150
40.0	--	26,200	27,150	26,600	27,300	25,950	26,650	26,550	24,800
45.0	--	21,050	22,100	21,900	22,250	21,000	21,650	22,000	21,850
50.0	--	--	18,350	19,150	18,550	17,350	18,650	18,300	18,150
55.0	--	--	15,400	16,450	15,800	14,650	16,100	15,600	15,500
60.0	--	--	13,050	14,100	13,850	13,600	13,850	13,350	13,250
65.0	--	--	--	12,150	11,950	12,050	12,000	11,500	11,400
70.0	--	--	--	10,600	10,350	10,500	10,500	10,000	9,910
75.0	--	--	--	9,270	9,040	9,170	9,220	8,750	8,640
80.0	--	--	--	--	7,910	8,030	8,110	7,660	7,560
85.0	--	--	--	--	7,080	7,050	7,120	6,730	6,620
90.0	--	--	--	--	--	6,210	6,260	5,890	5,810
95.0	--	--	--	--	--	--	5,510	5,140	5,050
100.0	--	--	--	--	--	--	4,850	4,470	4,390
105.0	--	--	--	--	--	--	4,280	3,880	3,800
110.0	--	--	--	--	--	--	--	3,360	3,270
115.0	--	--	--	--	--	--	--	2,890	2,800
120.0	--	--	--	--	--	--	--	--	2,390

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

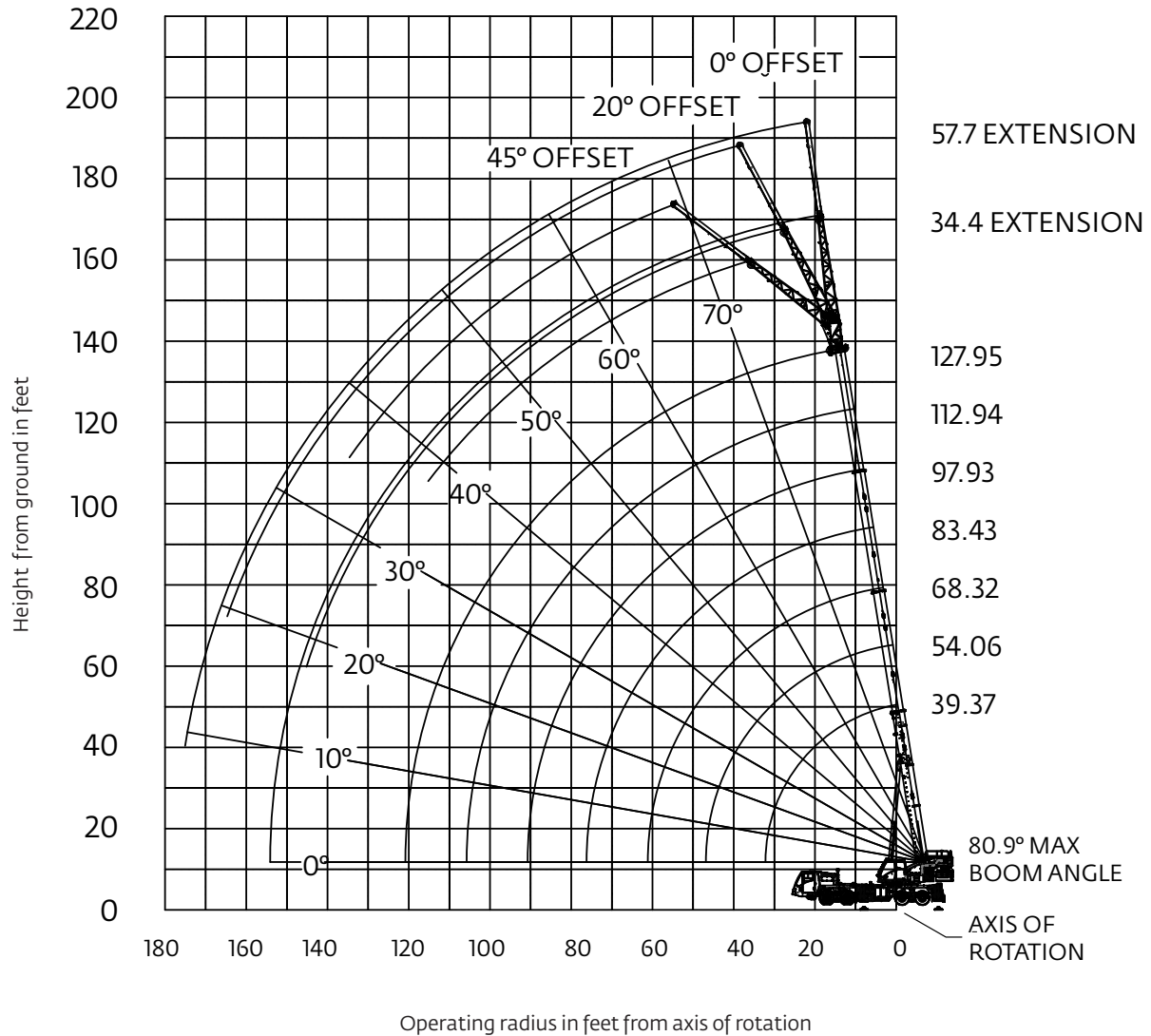
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Working range

Main boom and hydraulic or manual extension

**39.4 ft - 128.0 ft main boom, 34.5 ft - 57.6 ft hydraulic or manual offsettable extension**

(Boom deflection not shown)



*THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.  
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.*

# Load chart

## Main boom and manual extension

 128.0 ft  
Fixed length

 39.4 ft - 57.6 ft  
Manual offsettable  
swingaway

 28,000 lb

 100%  
24 ft

 360°



Pounds

Feet	39.4 ft			57.6 ft		
	0°	20°	45°	0°	20°	45°
25.0	13,100	--	--	--	--	--
30.0	13,100	--	--	--	--	--
35.0	13,100	--	--	7,900	--	--
40.0	13,100	13,400	--	7,900	--	--
45.0	13,100	13,400	--	7,900	--	--
50.0	13,100	13,400	12,300	7,900	--	--
55.0	13,100	13,150	12,000	7,900	8,650	--
60.0	12,750	12,150	11,700	7,900	8,360	--
65.0	11,700	11,200	11,050	7,900	8,090	--
70.0	10,800	10,400	10,250	7,900	7,840	6,150
75.0	10,000	9,690	9,610	7,900	7,610	6,040
80.0	9,280	9,030	8,980	7,900	7,400	5,940
85.0	8,630	8,430	8,410	7,550	7,200	5,850
90.0	8,040	7,880	7,890	7,020	6,880	5,770
95.0	7,500	7,380	7,410	6,540	6,440	5,700
100.0	7,020	6,930	6,970	6,100	6,040	5,630
105.0	6,570	6,510	6,560	5,700	5,660	5,540
110.0	6,160	6,120	6,180	5,330	5,310	5,450
115.0	5,780	5,760	5,830	4,980	4,990	5,130
120.0	5,430	5,420	--	4,660	4,680	4,820
125.0	5,110	5,110	--	4,370	4,400	4,540
130.0	4,780	4,820	--	4,090	4,140	4,270
135.0	4,330	4,490	--	3,840	3,890	4,010
140.0	3,920	4,040	--	3,600	3,650	--
145.0	3,540	3,630	--	3,370	3,430	--
150.0	3,200	--	--	3,160	3,220	--
155.0	2,920	--	--	2,960	3,020	--
160.0	--	--	--	2,770	2,830	--
165.0	--	--	--	2,490	2,650	--
170.0	--	--	--	2,230	--	--
175.0	--	--	--	2,000	--	--

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# Load chart

## Main boom and hydraulic extension

 128.0 ft  
Fixed length

 39.4 ft - 57.6 ft  
Hydraulic offsettable  
swingaway

 28,000 lb

 100%  
24 ft

 360°



Pounds

Feet	39.4 ft			57.6 ft		
	0°	0 - 20°	20 - 45°	0°	0 - 20°	20 - 45°
25.0	13,100	--	--	--	--	--
30.0	13,100	--	--	--	--	--
35.0	13,100	--	--	7,890	--	--
40.0	13,100	13,100	--	7,890	--	--
45.0	13,100	13,100	--	7,890	--	--
50.0	13,100	13,100	12,300	7,890	--	--
55.0	13,100	13,100	12,000	7,890	7,890	--
60.0	12,700	12,100	11,700	7,890	7,890	--
65.0	11,700	11,200	11,000	7,890	7,730	--
70.0	10,750	10,350	10,250	7,890	7,490	5,940
75.0	9,970	9,660	9,580	7,890	7,270	5,850
80.0	9,250	9,000	8,960	7,890	7,060	5,760
85.0	8,590	8,400	8,390	7,520	6,870	5,690
90.0	8,010	7,850	7,850	7,000	6,690	5,620
95.0	7,470	7,350	7,350	6,510	6,420	5,560
100.0	6,980	6,900	6,900	6,070	6,010	5,510
105.0	6,540	6,470	6,470	5,670	5,640	5,460
110.0	6,130	6,080	6,080	5,300	5,290	5,290
115.0	5,750	5,720	5,720	4,960	4,960	4,960
120.0	5,400	5,390	--	4,640	4,640	4,660
125.0	5,080	5,080	--	4,340	4,340	4,380
130.0	4,780	4,780	--	4,070	4,070	4,110
135.0	4,400	4,400	--	3,810	3,810	3,860
140.0	3,980	3,980	--	3,570	3,570	--
145.0	3,600	3,600	--	3,340	3,340	--
150.0	3,260	--	--	3,130	3,130	--
155.0	2,970	--	--	2,930	2,930	--
160.0	--	--	--	2,750	2,750	--
165.0	--	--	--	2,570	2,570	--
170.0	--	--	--	2,300	--	--
175.0	--	--	--	2,070	--	--

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Specifications

## Super Structure

### Boom

12,2 m - 39,0 m (39.4 ft – 128.0 ft) four-section MEGAFORM™ boom with TWIN-LOCK™ pinning system. Maximum tip height: 54,8 m (179.8 ft).

### Boom nose

Five nylatron sheaves, mounted with removable pin-type rope guards.

Quick reeve boom nose. Removable auxiliary boom nose with removable pin type rope guard.

### Boom elevation

Single lift cylinder with integrated valve provides boom angle from -3.0° to 80.0°.

### \*Optional offsettable lattice extensions

- 10,5 m - 17,6 m (34.5 ft - 57.6 ft) bi-fold lattice swingaway extension manually offset at 0°, 20°, and 45°.
- Maximum tip height: 59,2 m (194.3 ft).
- 10,5 m - 17,6 m (34.5 ft - 57.6 ft) bi-fold lattice swingaway extension hydraulically offset from 0° - 45°. Controlled from the crane cab.
- Maximum tip height: 59,2 m (194.3 ft).

### \* Optional lattice insert

One 8 m (26.2 ft) insert for use with lattice swingaway extension to increase the total extension length up to 25,6 m (83.8 ft).

Maximum tip height: 67,2 m (220.5 ft).

### Rated Capacity Limiter and anti-two block system

Load moment and anti-two block system with audio/visual warning and control lever lockout provides electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication, slew angle and warning of impending two-block condition.

### Crane Control System (CCS)

Full electronic control of all crane movements using electrical control allowing user customization of levels and response. Integrated with the RCL and engine management system by CAN-BUS. Full-color high resolution graphic display.

*\*Denotes optional equipment*

### Cab

All aluminum construction cab with acoustical lining tilts hydraulically to +20° and includes tinted safety glass, air conditioning, adjustable operator's seat with hydraulic suspension, hinged front (with wiper) and rear windows, sun visor and window shade. Other features include diesel heater/defroster, stereo radio/disc player, armrest integrated crane controls, and ergonomically arranged instrumentation.

### Swing

Two planetary gearboxes with axial piston fixed displacement motors. Infinitely variable to 1.9 rpm. Spring-applied park brakes and hydraulic service brakes.

### Counterweight

8165 kg (18,000 lb) consisting of multiple sections with hydraulic installation/removal system operated from the cab.

\*Optional "Heavy Lift" counterweight package consisting of (1) 4636 kg (10,000 lb) section in addition to standard, for a total of 12 701 kg (28,000 lb).

### Hydraulic system

Two load-sensing axial piston variable displacement pump (load sensing) with power limiting control and one gear pump for slewing and steering. Dual fan electric oil cooler. On screen display of hydraulic oil temperature.

Tank capacity 556 liters (147 gallons).

### Hoist

Main and auxiliary hoists are powered by axial piston motors with planetary gears and brakes. "Thumb-thumper" hoist drum rotation indicator alerts operator of hoist movement. Standard minimum wrap indication with lock-out.

Hoist line pull:

- 1st Layer: 10 000 kg (22,100 lb)
- 3rd Layer: 8570 kg (18,900 lb)
- 5th Layer: 7480 kg (16,500 lb)

Maximum line speed: 129 m/min (423 fpm)

Maximum permissible line pull: 7784 kg (17,160 lb) 35X7 Class

Rope diameter: 19 mm (3/4 in)

Rope length main hoist: 199 m (653 ft)

Rope length auxiliary hoist: 128 m (420 ft)

Maximum rope storage: 297 m (976 ft)

### Cameras

Back-up, right-side and hoist cameras.

# Specifications

## Lower Carriage



### Chassis

Torsionally rigid frame, four-axle carrier, fabricated from high strength, low alloy steel with towing and tie-down lugs.



### Outrigger system

Four hydraulic telescoping, two-stage, double box beam outriggers and integral holding valves.

Quick release type outrigger floats 610 mm (24 in) diameter.

Four position setting with fully extended, 77%, 54%, and fully retracted capacities. Fifth (5th) front jack with sliding self-storing pad and automatic first-retract.

Outrigger Monitoring System standard (required for North America and Canada).

Maximum outrigger pad load: 45,360 kg (100,000 lb)



### Outrigger controls

Located in the superstructure cab and on either side of carrier. Crane level indicators located at all stations.

Auto leveling and wireless remote control standard.



### Engine

Cummins X 12 six-cylinder, turbo charged and after cooled diesel engine. 12 L 354 kW (475 bhp) at 1800 rpm. Maximum torque 2102 Nm (1550 lb-ft) at 1400 rpm. "On Highway" EPA, CARB compliant.

Equipped with engine compression brake, ether start aid and 110 volt block heater.

Fuel Requirement: Maximum of 15 ppm sulfur content (Ultra Low Sulfur Diesel). Diesel exhaust fluid required.



### Fuel tank capacity

376 L (100 gal)



### Transmission

Roadranger 11 speeds forward, 3 reverse, manual.

Optional automated Eaton Fuller Ultrashift® PLUS Transmission.



### Steering

Front axles, single circuit, mechanical steering with hydraulic power assist.

Turning radius: 13,8 m (45.4 ft).



### Axles

**Front:** (2) tube-type steering axles, 2,12 m (83.4 in) track.

**Rear:** (2) single reduction drive axles, 1,89 m (74.5 in) track. Inter-axle differential locks. Drive: 8 x 4 x 4.



### Brakes

S-cam, dual air split system operating on all wheels. Spring-applied, air released parking brake acting on rear axles. Air dryer. ABS with traction control.



### Suspension

**Front:** Walking beam with air bags and shock absorbers.

**Rear:** Walking beam with air bags and shock absorbers.



### Tires

**Front:** 445/65R 22.5 tubeless, mounted on aluminum disc wheels.

**Rear:** 315/80R 22.5 tubeless, mounted on aluminum disc wheels.



### Lights

Lighting package including turn indicators, head, tail, brake, and hazard warning lights.



### Cab

Single-driver design, aluminum fabricated with acoustical lining and tinted safety glass. Air conditioning. Fabric covered seat with air adjustment. Driving controls and engine instrumentation including tilt telescope multifunction steering wheel, tachometer, speedometer, trip meter, voltmeter, water temp., oil, fuel level, air pressure gauge, engine high temp./low oil pressure A/V warning. Other standard items include display for back-up and passenger side cameras, hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, wireless rigging remote with battery charging station, seat belt and door lock.



### Electrical system

Four maintenance-free batteries provide 24 V electrical system. Standard lockable battery disconnect.



### Maximum speed

105 kph (65 mph)



### Gradeability (theoretical)

70%, 1st gear

# Specifications

## Lower Carriage (cont.)

### Miscellaneous standard equipment

- Aluminum fenders with rear storage compartments
- Dual rear viewmirrors
- Electronic back-up alarm
- Sling/tool box
- Tire inflation kit
- Air cleaner restriction indicator
- Headache ball stowage tray
- Air conditioning
- Air horn
- Hoist access platform

### \*Optional equipment

- Auxiliary Lighting and Convenience Package  
Includes amber strobe light for superstructure and carrier cab, and boom nose mounted, boom position indicator light (fully wired)
- Dual boom base mounted floodlights (manual or power-adjusted)
- Hook blocks
- Pintle hook (rear)
- Trailing Boom Package
- Aluminum outrigger pads
- Outrigger mat stowage and mats
- Counterweight packages
- Tow cable
- Wind speed indicator
- Winterfront radiator cover
- Counterweight slings
- Cross axle differential locks
- Electric controlled 360° lock
- Rear counterweight stowage
- Single axis joysticks
- Boom dolly camera

# Notes

# Notes

# Notes

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